

CONFIDENTIAL

Release Date 12-31-67

HUMBLE #1 NAVAJO-87
SE NE 23-36N-29E Apache County 401

P-W

COUNTY Apache AREA 15 mi SW Red Rock LEASE NO. Nav 14-20-0603-8811
Dineh bi Keyah Field

WELL NAME HUMBLE #1 NAVAJO-87

LOCATION SE NE SEC 23 TWP 36N RANGE 29E FOOTAGE 1830 FNL 880 FEL
STATUS P&A TOTAL
ELEV 8960 GR 8980 KB SPUD DATE 4-28-67 COMP. DATE 10-16-69 DEPTH 5505'
5473'

CONTRACTOR Loffland Brothers Drilling

CASING SIZE	DEPTH	CEMENT	LINER SIZE & DEPTH	DRILLED BY ROTARY
<u>9 5/8</u>	<u>1350</u>	<u>1100 Sks</u>	<u>NA</u>	<u>x</u>
<u>4 1/2</u>	<u>5505</u>	<u>325 SKS</u>		

DRILLED BY CABLE TOOL
PRODUCTIVE RESERVOIR
INITIAL PRODUCTION Abd. 10-16-69

FORMATION TOPS	DEPTHS	SOURCE		REMARKS
		L.L.	E.L.	
Coconino	2352'	X	x	
Cutler	3053			
Hermosa	4195'			
Ismay	4396'			
Desert Creek	4503'			
Alkah	4559			
Mississippian	4909'			
Devonian	5076'			
McCracken	5212'			
Aneth	5347'			
Pre-Cambrian	5464'			

ELECTRIC LOGS	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG <u>Am Strat</u>
Comp. Formation Density			SAMPLE DESCRP.
IE, Sonic-GR			SAMPLE NO. <u>1438*</u>
			CORE ANALYSIS <u>x</u>
			DSTs
			*Lucson 2091

REMARKS	APP. TO PLUG <u>x</u>
	PLUGGING REP. <u>x</u>
	COMP. REPORT <u>x</u>

WATER WELL ACCEPTED BY

BOND CO. American Insurance Company BOND NO. 5-10-11-58
DATE
BOND AMT. \$ 25,000 CANCELLED 3-16-98 ORGANIZATION REPORT 3-22-67
FILING RECEIPT 9493 LOC. PLAT x WELL BOOK x PLAT BOOK x
API NO. 02-001-20025 DATE ISSUED 4-25-67 DEDICATION NE/4

PERMIT NUMBER 461

CONFIDENTIAL


Release Date 12-13-67

(over)

NO.	FROM	TO	RESULTS
1	5225	5505'	Misrun
2	5195	5505'	Misrun
3	5231	5505'	Shut in 1 hr, opened to flow 2 hrs and 40 min. final shut in 5 hrs and 20 min. Flowed gas at stabilized rate of 605 MCFGPD.
			HH 2409-2396. FP 242-87, SIP 1597-960. Gas would not burn.

NO.	FROM	TO	RECOVERY	REMARKS
1	5232	5245	12'	Sandstone, buff, very hard, dense, very fine grained, calcareous and silica cement, fused.
2	5268	5288	19½'	12' as above 8' shale, red & green, dolomitic
3	5288	5344		Shale, red & green, dolomitic, sandy
4	5344	5351	4'	Shale As above, 1' domomite, cobbles and 2' domomite

DATE STARTED - COMPLETED		WORK PERFORMED	NEW PERFORATIONS

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG									
DESIGNATE TYPE OF COMPLETION:									
New Well <input checked="" type="checkbox"/>	Work-Over <input type="checkbox"/>	Deepen <input type="checkbox"/>	Plug Back <input type="checkbox"/>	Same Reservoir <input type="checkbox"/>	Different Reservoir <input type="checkbox"/>	Oil <input type="checkbox"/>	Gas <input checked="" type="checkbox"/>	Dry <input type="checkbox"/>	
DESCRIPTION OF WELL AND LEASE									
Operator Humble Oil & Refining Company					Address P. O. Box 120, Denver, Colorado 80201				
Federal, State or Indian Lease Number or name of lessor if fee lease 14-20-0603-8811 - Navajo Tract 87					Well Number 1		Field & Reservoir Wildcat		
Location SE NE (1830' FNL & 880' FEL) of Sec. 23					County Apache				
Sec. TWP-Range or Block & Survey Sec. 23-36N-29E - G&SRM									
Date spudded 4-28-67		Date total depth reached 5-23-67		Date completed, ready to produce Temp. SI 5-30-67		Elevation (DE, RKB, RT or Gr.) 8980' KB feet		Elevation of casing hd. flange 8960' feet	
Total depth 5505'		P.B.T.D. 5473'		Single, dual or triple completion? -		If this is a dual or triple completion, furnish separate report for each completion.			
Producing interval (s) for this completion No completion attempt made pending gas market					Rotary tools used (interval) 0-5505'		Cable tools used (interval) None		
Was this well directionally drilled? No		Was directional survey made? -		Was copy of directional survey filed? -		Date filed -			
Type of electrical or other logs run (check logs filed with the commission) IES & Gamma Ray Sonic							Date filed June, 1967		
CASING RECORD									
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)									
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled			
Surface	13-3/4"	9-5/8"	32#	1350'	1100	None			
Production	8-3/4"	4-1/2"	9.5#	5505'	325	None			
TUBING RECORD					LINER RECORD				
Size None	Depth set. in.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)		
PERFORATION RECORD					ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD				
Number per ft.	Size & type	Depth Interval		Am't. & kind of material used			Depth Interval		
No completion attempt made pending gas market.									
INITIAL PRODUCTION									
Date of first production None - DST Only			Producing method (indicate if flowing, gas lift or pumping—If pumping, show size & type of pump:)						
Date of test	Hrs. tested	Choke size	Oil prod. during test bbis.	Gas prod. during test MCF	Water prod. during test bbis.	Oil gravity ° API (Corr)			
Tubing pressure	Casing pressure	Cal'ed rate of Production per 24 hrs.	Oil bbis.	Gas MCF	Water bbis.	Gas-oil ratio			
Disposition of gas (state whether vented, used for fuel or sold):									
<p style="text-align: right;">Dist. Supt.</p> <p>CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the _____ of the Humble Oil & Refining Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.</p>									
Date 2-21-69			 Signature J. Roy Dorrough						
Permit No. 401			<div style="text-align: center;"> STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log File One Copy Form No. 4 </div>						

(Complete Reverse Side)

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Coconino	2352'	3053'	
Cutler	3053'	4195'	
Hermosa	4195'	4396'	
Ismay	4396'	4503'	
Desert Creek	4503'	4559'	
Akah	4559'	4909'	
Mississippian	4909'	5076'	
Devonian	5076'	5212'	
McCracken	5212'	5347'	
Aneth	5347'	5464'	
Pre-Cambrian	5464'	5505' TD	

The above tops vary slightly from those reported on report of 6-2-67 which were preliminary picks from field prints.

DST #1 - 5225-5505' - Misrun, packer failed.

DST #2 - 5195-5505' - Misrun, packer failed.

DST #3 - 5231-5505' - Shut in 1 hour, opened to flow 2 hours and 40 minutes, final shut in 5 hours and 20 minutes. Flowed gas at stabilized rate of 605 MCFGPD. HH 2409-2396. FP 242-87, SIP 1597-960. Gas would not burn. Analysis of gas shows helium content of 5.73%.

Core #1 - 5232-45', recovered 12'. Sandstone, buff, very hard, dense, very fine grained, calcareous and silica cement, fused.

Core #2 - 5268-88', recovered 19 1/2'. 12' as above. 8' shale, red & green, dolomitic, sandy.

Core #3 - 5288-5344'. Shale, red & green, dolomitic, sandy.

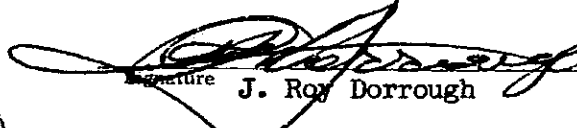
Core #4 - 5344-51'. 4' shale as above, 1' dolomite, cobbles and 2' dolomite, slightly sandy.

* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

PLUGGING RECORD					
Operator Humble Oil & Refining Company			Address P. O. Box 120, Denver, Colorado 80201		
Federal, State, or Indian Lease Number, <small>or lessor's name if gas lease.</small> 14-20-0603-0011 - Navajo Tract 87		Well No. 1	Field & Reservoir Dineh bi Keyah		
Location of Well SE NE (1830' FNL & 880' FEL) of Section 23-36N-29E - G&SRM			Sec-Twp-Rge or Block & Survey		County Apache
Application to drill this well was filed in name of Humble Oil & Refining Co. - Navajo Tract 87		Has this well ever produced oil or gas No	Character of well at completion (initial production) Oil (bbls/day) Gas (MCF/day) Casing was never perforated.		Temp. Abd. Non Commercial
Date plugged: 10-16-69		Total depth 5505'		Amount well producing when plugged: Oil (bbls/day) Gas (MCF/day) Water (bbls/day) None ; None None	
Name of each formation con- taining oil or gas. Indicate which formation open to well- bore at time of plugging		Fluid content of each formation		Depth interval of each formation	
Casing was never perforated for testing.				Size, kind & depth of plugs used Indicate zones squeeze cemented, giving amount cement	
				See attached copy of	
				U.S.B.S Report for	
				complete plugging	
				summary.	
CASING RECORD					
Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped, etc.)	Packers and shoes
4-1/2"	5505'	None	5505'	-	-
9-5/8"	1350'	None	1350'	-	-
Was well filled with mud-laden fluid, according to regulations? Yes					
Indicate deepest formation containing fresh water. Chuska					
NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE					
Name		Address		Direction from this well:	
Kerr-McGee Oil Company		Oklahoma City, Oklahoma		East	
No other adjacent operators.					
Navajo Tribe of Indians owns all surface.					
In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plug- ging which might be required.					
Use reverse side for additional detail.					
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Dist. Supt.</u> of the					
Humble Oil & Refining Company (company) and that I am authorized by said company to make this report; and that this					
report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.					
Date 10-24-69		Signature  J. Roy Dorrough			
Permit No. 401		<div style="text-align: center;"> STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Plugging Record File One Copy </div>			
		Form No. 10			

APPLICATION TO ABANDON AND PLUG

FIELD Dineh bi Keyah
 OPERATOR Humble Oil & Refining Company ADDRESS P. O. Box 120, Denver, Colorado 80201
 Federal, State, or Indian Lease Number
 or Lessor's Name if Fee Lease 14-20-0603-8811 - Navajo Tract 87 WELL NO. 1
 SURVEY 36N-29E G&SRM SECTION 23 COUNTY Apache
 LOCATION SE NE (1830' FNL & 880' FEL) of Section 23

TYPE OF WELL Non Commercial - Temp. Abandoned TOTAL DEPTH 5505' - PHTD 5473'
 (Oil, Gas or Dry Hole)

ALLOWABLE (If Assigned)

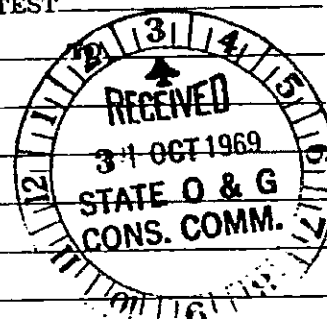
LAST PRODUCTION TEST OIL (Bbls.) WATER (Bbls.)
 GAS (MCF) DATE OF TEST

PRODUCING HORIZON None PRODUCING FROM

1. COMPLETE CASING RECORD

Surface - 9-5/8" 32# set at 1350'.

Production - 4 1/2" 9.5# set at 5505'.



2. FULL DETAILS OF PROPOSED PLAN OF WORK See attached well bore sketch.

A regulation Dry Hole Marker will be installed.

If well is to be abandoned, does proposed work conform with requirements of Rule 202? _____ If not, outline proposed procedure above.

DATE COMMENCING OPERATIONS Immediately after approval.

NAME OF PERSON DOING WORK Mr. H. L. Farria ADDRESS P. O. Box "I", Farmington, N.M.

CORRESPONDENCE SHOULD BE SENT TO J. Roy Dorrrough
Dist. Supt.

Title

P. O. Box 120, Denver, Colorado 80201

Address

9-30-69

Date

Date Approved 10-6-69

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION

By: John V. Gannister

Permit No. 401

STATE OF ARIZONA
 OIL & GAS CONSERVATION COMMISSION
 Application to Abandon and Plug
 File Two Copies

Form No. 9

Form approved.
Budget Bureau No. 42-R356.5.

LAND OFFICE _____
LEASE NUMBER 14-20-0603-8811
UNIT _____

State Arizona County Apache Field Dineh bi Keyah
The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 1969,
Agent's address P. O. Box 120 Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed [Signature]
Phone 534-1251 Agent's title Dist. Supt.

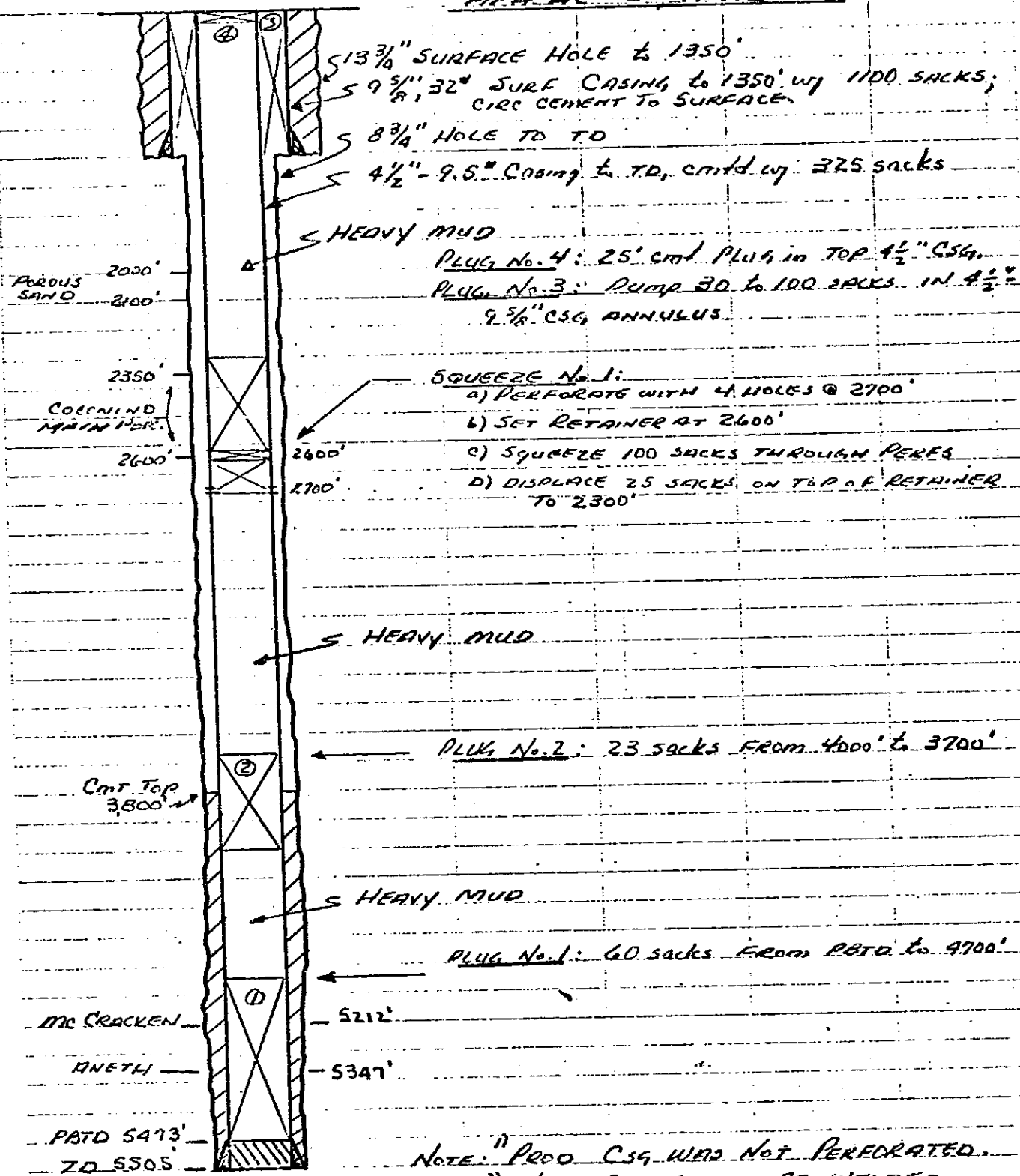
SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL No.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
<u>NAVAJO TRACT 87 - ARIZONA PERMIT NO. 401</u>										
Sec. 23 SE NE 4 ^c	36N	29E	1	0						Well plugged and abandoned 10-16-69.
<u>FINAL REPORT</u>										
cc: 2 - Arizona Oil & Gas Conservation Commission 1 - Minerals Supervisor - Navajo Tribe										

cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Minerals Supervisor - Navajo Tribe

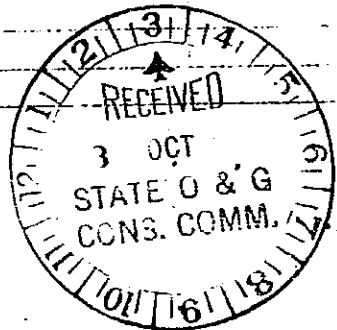
NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

HUMBLE OIL & REFINING CO.
PROPOSED PLUGGING PROCEEDURE
NAVAHO TR. 87, WELL No. 1
SE NE SEC 23-36N-29E
APACHE CO. ARIZONA



NOTE: "PROD. CSG. WAS NOT PERFORATED."
A STEEL PLATE WILL BE WELDED
ACROSS TOP OF 4 1/2" CASING AND
CASING ANNULUS. CASING HEAD
SIDE OUTLETS WILL BE CAPPED WITH
WELDED PLATES.



Form 9-331
(May 1983)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. ☐ OIL WELL ☐ GAS WELL ☐ OTHER Non Commercial - Temp. Abandoned

2. NAME OF OPERATOR

Humble Oil & Refining Company

3. ADDRESS OF OPERATOR

P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

SE NE (1830' FNL & 880' FEL) of Section 23

14. PERMIT NO.

Arizona #401

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

8980' KB

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-8811

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

-

8. FARM OR LEASE NAME

Navajo Tract 87

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Dineh bi Keyah

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 23-36N-29E - G&SRM

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Ran tubing to PBTD 5473'. Displaced water out of casing with mud. Placed cement plug (60 sx) 5473-4700'. Pulled tubing to 4000'. Placed 23 sx cement plug 4000-3700'. Pulled tubing completely out of hole. Ran in with Schlumberger gun and found top of cement at 3686'. Pulled gun up to 2700'. Shot 3 holes around casing. Ran tubing and 4 1/2" permanent type cement retainer and set at 2600'. Squeezed in 100 sx cement through perforations. Maximum pressure 1500 psi, minimum pressure 250 psi. Pulled loose from retainer and put 25 sx cement plug on top of retainer. Pulled tubing. Left 1 joint in top of 4 1/2" casing. Filled 4 1/2" casing 31' to surface with cement. Pulled joint out. Pumped 110 sx cement through bradenhead between 4 1/2" and 9-5/8" surface casing. Maximum pressure 250#, 10-12-69. On 10-16-69 added 50 sx cement to annulus between 4 1/2" and 9-5/8". Checked later - annulus standing full of cement.

Welded a steel plate across top of 4 1/2" casing and casing annulus. Capped casing head side outlets with welded steel plates. Regulation dry hole marker welded onto steel plate. Job complete 10-16-69.

Location is cleaned and ready for inspection.

cc: Mr. Perry K. Hurlbut - Minerals Supervisor - Navajo Tribe
Mr. Cato Sells - Water Development - Navajo Tribe

18. I hereby certify that the foregoing is true and correct

SIGNED

J. Ray Dorrough
(This space for Federal or State office use)

TITLE

Dist. Sup

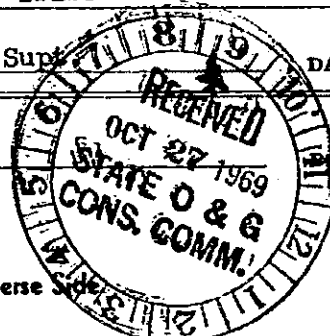
DATE 10-24-69

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

*See Instructions on Reverse Side



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-B356.5.

LAND OFFICE 14-20-0603-8811
LEASE NUMBER
UNIT

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah
The following is a correct report of operations and production (including drilling and producing wells) for the month of September, 1969.
Agent's address P. O. Box 120 Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed [Signature]
Phone 534-1251 Agent's title Dist. Supt.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DATE PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 87 - ARIZONA PERMIT NO. 401										
Sec. 23 SE NE	36N	29E	1	0						Operations suspended 5-30-67. See Sundry Notice dated 6-2-67. No work has been done since this date.
SUNDY NOTICE APPLICATION TO PLUG AND ABANDON SUBMITTED 9-30-69.										
NOTE: CONTINUE IN TEMPORARY ABANDONED STATUS PER LETTER DATED 6-15-67 AND YOUR APPROVAL OF 6-20-67. ALSO YOUR LETTER DATED 6-12-69 GRANTING APPROVAL TO CONTINUE IN THIS STATUS UNTIL 6-16-70.										
cc: 2 - Arizona Oil & Gas Conservation Commission 1 - Minerals Supervisor - Navajo Tribe										

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;
No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R356.5.

LAND OFFICE _____
LEASE NUMBER 14-20-0603-8811
UNIT _____

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah

The following is a correct report of operations and production (including drilling and producing wells) for the month of August, 1969.

Agent's address P. O. Box 120 Company Humble Oil & Refining Company

Denver, Colorado 80201 Signed _____

Phone 534-1251 Agent's title Dist. Supt.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If NONE, SO STATE)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 87 - ARIZONA PERMIT NO. 401										
4 ^u Sec. 23 SE NE	36N	29E	1	0						Operations suspended 5-30-67. See Sundry Notice dated 6-2-67. No work has been done since this date.

NOTE: CONTINUE IN TEMPORARY ABANDONED STATUS PER LETTER DATED 6-15-67 AND YOUR APPROVAL OF 6-20-67. ALSO YOUR LETTER DATED 6-12-69 GRANTING APPROVAL TO CONTINUE IN THIS STATUS UNTIL 6-16-70.

cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Minerals Supervisor - Navajo Tribe

NOTE.—There were No runs or sales of oil; No M cu. ft. of gas sold;
No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R356.5.

LAND OFFICE 14-20-0603-8811
LEASE NUMBER
UNIT

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Dineh bi Keyah
The following is a correct report of operations and production (including drilling and producing wells) for the month of June, 19 67,
Agent's address P. O. Box 120, Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed JOHN R. CROUCH
Phone 534-1251 Agent's title Dist. Administrative Supr.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL No.	DATA Produced	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (in thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 87										
Sec. 23 SE NE	36N	29E	1							Temp. and 5-30-67. TD 5505'.
CONFIDENTIAL										
cc: 2 - Arizona Oil & Gas Conservation Commission										
1 - Mr. Henry F. Pohlman, Minerals Supr., Navajo Tribe.										

NOTE.—There were no runs or sales of oil; no M cu. ft. of gas sold;

no runs or sales of gasoline during the month. (Write "no" where applicable.)
NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

etterette

TO	Oil & Gas Conservation Commission	LOCATION	1624 West Adams - Suite 202, Phoenix, Ariz. 85007
FROM	Humble Oil & Refining Company	LOCATION	P. O. Box 120, Denver, Colorado 80201
SUBJECT	Gas Analysis - Navajo Tract 87 #1	DATE	6-27-67

MESSAGE

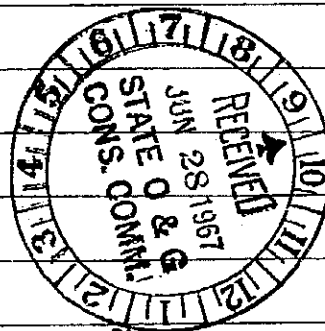
Attached find Bureau of Mines analysis for the above well. This should be used in lieu of the one furnished with other data on 6-26-67 which was tabulated from phone information.

SIGNATURE

M. D. Smith

REPLY

SIGNATURE



Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-8811

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Tract 87 #1

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 23-36N-29E G&SRM

12. COUNTY OR PARISH

Apache

13. STATE

Arizona

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR

Humble Oil & Refining Company

3. ADDRESS OF OPERATOR

P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface

SE NE (1830' FNL & 880' FEL) of Section 23-36N-29E.

14. PERMIT NO.

401 - Arizona

15. ELEVATIONS (Show whether OF, RT, OR, etc.)

8960' GR & 8980' KB

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANE

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

Casing & Well History XX

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Drilled 8-3/4" hole to TD of 5505'. Set 4 1/2" OD 9.5# J-55 casing at 5505' and cemented with 325 sacks 50-50 Pozmix cement with 2% gel and 25# Gilsomite per sack. Job complete 5-29-67. Top of cement by temperature survey 4100'.

CORE #1: 5232-45' - See attached core analysis.

CORE #2: 5268-80' - See attached core analysis.
5280-88' - Shale, red & green, dolomitic, sandy.

CORE #3: 5288-5344' - Shale as above.

CORE #4: 5344-51' - 4' Shale as above; 21' Dolomite, bobbles and 2' Dolomite, slightly sandy.

DST #1: 5505-5225' - Miarum - packer failed.

DST #2: 5505-5195' - Miarum - packer failed.

DST #3: 5505-5231' - Shut in 1 hour, open 2 hours 40 minutes, shut in 5 hours 20 minutes.

Flowed gas at stabilized rate of 605 MCPPD. IHP 2409#, ISIP 1597#, IFP 242#, FFP 87#, FSIP 960#, FRP 2396#. Gas would not burn. Preliminary analysis of gas by Bureau of Mines at Shiprock shows helium content of 5.73% on DST #3. Complete analysis will be furnished when available from Bureau of Mines. Operations will now be suspended for an indeterminate time pending possible market, and no completion attempt will be made at this time. You will be notified when operations resume and after completion or other disposition is completed a "Log of Well" will be submitted. One copy of Electric Logs furnished previously and one additional copy enclosed.

18. I, hereby certify that the foregoing is true and correct

SIGNED H. L. Spiller

(This space for Federal or State office use)

Exploration
District Operations Supt.

DATE 6-2-67

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Mr. Henry F. Rehlmann, *See Instructions on Reverse Side
Minerals Supr., Navajo Tribe

CONFIDENTIAL

Still Not Complete.

401

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. Consult local office for details.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant hydrocarbon potential; depths (top and bottom) and method of placement of cement plugs; and other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site abandoned for final inspection looking to approval of the abandonment.

U.S. GOVERNMENT PRINTING OFFICE: 1961-O-606229

DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description
Chinle	Surface	1187'	Loose sand.
Wingate	1187'	1338'	Sandstone & brown silt.
Chinle	1338'	2355'	Siltstone; red & grey-green (some sandstone).
Coconino	2355'	2820'	Sandstone; tan & orange.
Spring Rock	2820'	3050'	Sandstone; tan & orange with red siltstone.
Rio	3050'	4018'	Siltstone; brown & green with some limestone.
Hermosa	4018'	4386'	Shale; brown & green with streaks cherty limestone.
Wingate	4386'	4504'	Limestone; cherty & fossiliferous with some sandstone.
Desert Creek	4504'	4560'	Limestone; buff, cherty, fossiliferous.
Almah	4560'	4848'	Limestone; buff, cherty, fossiliferous with variegated & dark shale streaks.
Sill	4848'	4866'	Igneous sill injected into limestone & shale.
Molas	4866'	4933'	Shale; variegated with limestone streaks.
Mississippian	4933'	5075'	Limestone & dolomite; crinoidal, cherty, oolitic.
Quincy	5075'	5148'	Dolomite; cherty, with some green shale.
Upper Albert	5148'	5218'	Dolomite; dense with some variegated silt.
McCracken	5218'	5297'	Sandstone; fine to coarse, glauconitic.
Lower Albert	5297'	5350'	Shale; brown & green, silty.
Arath	5350'	5445'	Dolomite; dense with dark grey shale streaks.
Cambrian	5445'	5465'	Shale; red & brown with some quartzitic sand.
Pre-Cambrian	5465'	5505'	Granite; pink, biotitic.

See Report No. 2-21-69



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Form approved.
Budget Bureau No. 42-R356.5.

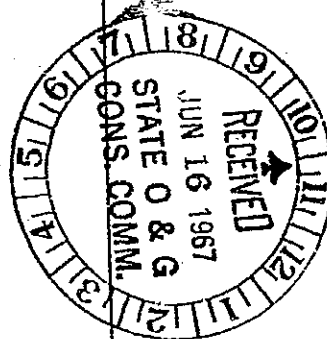
LAND OFFICE
LEASE NUMBER 14-20-0603-8811
UNIT

CONFIDENTIAL
MONTHLY REPORT OF OPERATIONS

State Arizona County Apache Field Wildcat
The following is a correct report of operations and production (including drilling and producing wells) for the month of May, 19 67,
Agent's address P. O. Box 120 Company Humble Oil & Refining Company
Denver, Colorado 80201 Signed ORIGINAL JOHN R. CROUCH
Phone 534-1251 Agent's title Dist. Administrative Supr.

SEC. AND 1/4 OF 1/4	TWP.	RANGE	WELL NO.	DATE PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (in thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
NAVAJO TRACT 87 - ARIZONA PERMIT #401										
Sec. 23 SE NE	36N	29E	1	0	0		0			Operations suspended 5-30-67. See Sundry Notice dated 6-2-67.

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cc: 2 - Arizona Oil & Gas Conservation Commission
1 - Mr. Henry F. Pohlmann, Minerals Supr., Navajo Tribe

NOTE.—There were no runs or sales of oil; no M cu. ft. of gas sold;

no runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Humble Oil & Refining Company, 2000 Classen Center, North Building, Oklahoma City, Oklahoma 73106 - Attn: Mr. H. L. Spiller

2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____

3. Well Name Navajo Tract 87 #1

Location SE NE (1830' FNL & 880' FEL) of Section 23-36N-29E G&SRM

Sec. 23 Twp. 36N Rge. 29E County Apache Arizona.

4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-0603-8811

5. Field or Pool Name Wildcat

6. Check Appropriate Box to Indicate Nature of Notice or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Change of Acreage Dedication</u>	ABANDONMENT <input type="checkbox"/>
(OTHER) _____			<input checked="" type="checkbox"/>

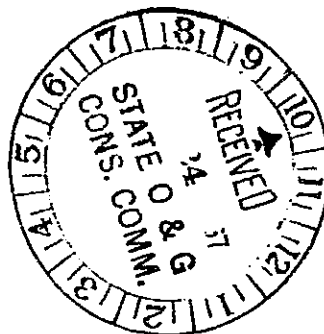
(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

As requested by your letter of May 19, 1967, and to comply with Commission Order dated May 10, 1967, please change the acreage dedication of the above well to read as follows:

160 acres - NE $\frac{1}{4}$ Sec. 23-36N-29E Apache County, Arizona.

CONFIDENTIAL



8. I hereby certify that the foregoing is true and correct.

Signed H. L. Spiller

Title Expl. Drilling Supt. Date May 23, 1967

By: Marvin D. Smith

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports On Wells
File Two Copies

Permit No. 401

Form No. 23

5-23-67

Telcon w/Roger Frazier, Humble

Re: 1-87

Drill pipe will be out of hole tonight at about 11:00 p.m.
Plan to be logging by midnight.

401

13

5-10-67 Humble 87-1
Mr. H.L. Spiller
2000 Gossen Center
North Building
Ok City

Wrote letter asking him to notify me
in time so that I might be
present when log.

SUNDY NOTICES AND REPORTS ON WELLS

1. Name of Operator Humble Oil & Refining Company, P. O. Box 120, Denver, Colorado 80201
 2. OIL WELL ☒ GAS WELL ☐ OTHER ☐ (Specify) _____
 3. Well Name Navajo Tract 87 #1
 Location SE NE (1830' FNL & 880' FEL) Section 23
 Sec. 23 Twp. 36N Rge. 29E County Apache Arizona.
 4. Federal, State or Indian Lease Number, or lessor's name if fee lease 14-20-0603-8811

5. Field or Pool Name Wildcat

6. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

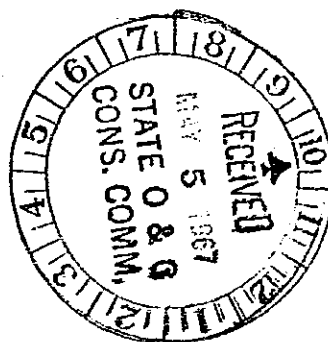
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	MONTHLY PROGRESS <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	DIRECTIONAL DRILL <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	PERFORATE CASING <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(OTHER) <u>Spudding & Surface Casing</u>	ABANDONMENT <input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Spudded 4-28-67. Drilled to a TD of 1350'. Set 9-5/8" OD 32.30# H-40 casing at 1350' and cemented with 1100 sacks of regular cement with 2% CaCl. Circulated OK with cement to surface.

CONFIDENTIAL



8. I hereby certify that the foregoing is true and correct.

Signed H. L. Spiller

Title Expl. Drilling Supt. Date 5-4-67

By: Marvin D. Smith

Permit No. 401

Form No. 25

STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION
Sundry Notices and Reports On Wells
File Two Copies

CONFIDENTIAL

JUN 15 1967

REPORT OF ANALYSIS

W. E. Ferrell
401

F.S.- 10971 M.S.N-31683, H 5.47 OBS. PRES. 63.9 CAL. PRES. 63.7

STATE- ARIZONA COUNTY- APACHE
FIELD- DINEH BI KEYAH WELL NAME-NAVAJO TRACT 87 NO. 1
LOCATION-SEC. 23, T36N, R29E OWNER- HUMBLE OIL & REFINING CO.
DATE COMPLETED- DRILLING DATE SAMPLED- 05-26-67
SAMPLED BY- BERT HILAND
NAME OF PRODUCING FORMATION- DEVONIAN *M^s Creek*
DEPTH IN FEET- 5223 THICKNESS IN FEET- 70
SHUT IN WELLHEAD PRES., PSIG- OPEN FLOW, MCF/D-

CHECK OF DATA-
THE WELL DATA ARE ACCURATE,WITHOUT CORRECTION,AS CORRECTED ABOVE.

REMARKS-

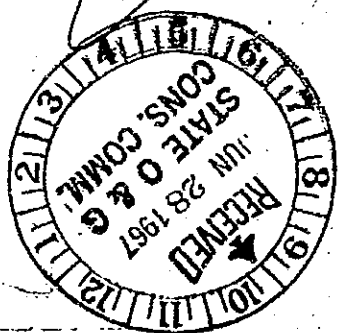
CONFIDENTIAL

ANALYSIS-

METHANE	3.1 %	NORMAL PENTANE	0.0 %	OXYGEN	.3 %
ETHANE	.4 %	ISOPENTANE	0.0 %	ARGON	.8 %
PROPANE	.2 %	CYCLOPENTANE	0.0 %	HYDROGEN	TRACE %
NORMAL BUTANE	.1 %	HEXANES PLUS	0.0 %	H ₂ S	0.0 %
ISOBUTANE	0.0 %	NITROGEN	78.8 %	CO ₂	10.6 %
SPECIFIC GRAV	.973			HELIUM	5.58 %
				TOTAL	99.9 %

CALCULATED GROSS BTU/CU FT, DRY AT 60 DEG F AND 30 IN. MERCURY- 47.

PERMISSION FOR RELEASE-
PERMISSION IS HEREBY GRANTED FOR THE BUREAU OF MINES TO RELEASE THE ABOVE
DATA, TOGETHER WITH SIMILAR DATA RELEASED BY OTHER OPERATORS AS PUBLIC
INFORMATION AND AS PARTS OF A SERIES OF PAPERS ON ANALYSES OF GASES FROM
VARIOUS FIELDS, STATES, OR REGIONS.



COMPANY.....
BY.....
TITLE.....

CONFIDENTIAL

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

Page No. 1
401

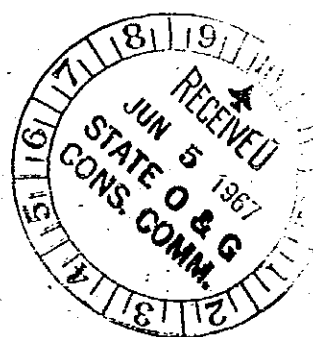
CORE ANALYSIS RESULTS

Company Humble Oil & Refining Company Formation Undesignated File RP-3-2212
Well Navajo #1 Tract 87 Core Type D/C Date Report 5/25/67
Field Undesignated Drilling Fluid Chem Gel Analysts Graham
County Apache State Arizona Elev 8963 Grd. Location Sec. 23-T36N-R29E

Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYs	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
		MAX.	90°			
1	5232 -33.5	0.14	0.12	7.4	1.6	25.4 SS:LT GRY, FN-MED, WELL CMTD, SLI/SHLY
2	5233.5-35.5	7.26	5.55	8.3	3.4	26.6 SS:GRY, FN, CLEAN, WELL CMTD
3	5235.5-37	4.07	3.03	5.9	3.6	27.8 SS:LT GRY, FN-CSE, V/SLI/CALC, SH STRNGRS
4	5237 -39	1.07	0.74	5.3	3.6	25.6 SS:GRY, FN-CSE, WELL CMTD
5	5239 -40	2.18	2.18	5.5	5.1	14.4 SS:GRY, CSE, WELL CMTD, PIN PT POR, SHLY
6	5240 -41	3.41	3.26	5.8	3.5	14.5 SS:LT GRY, FN-CSE, WELL CMTD, PIN PT POR, SHLY
7	5241 -42	0.42	0.26	3.0	6.3	19.3 SS:GRY, FN-MED, V/DENS, VERT FRAC
8	5242 -43.5	0.15	0.13	4.1	4.6	46.4 SS:GRY, MED-CSE, PIN PT POR, VERT FRAC
9	5243.5-45	0.20	0.14	3.9	4.9	76.4 SS:GRY, FN-CSE, WELL CMTD
10	5268 -69.5	2.57	2.26	10.6	1.1	23.7 SS:GRY, FN-MED, PIN PT POR, SHLY
11	5269.5-71	21.2	13.7	8.4	2.1	34.2 SS:GRY, FN-CSE, PIN PT POR, VERT FRAC
12	5271 -72.5	7.0	6.8	7.2	1.7	30.0 SS:GRY, FN-MED, PIN PT POR
13	5272.5-74	6.56	3.37	8.4	4.2	24.6 SS:LT GRY, MED, PIN PT POR, SHLY, VERT FRAC
14	5274 -75.5	3.64	3.22	7.0	2.4	33.4 SS:GRY, FN-MED, PIN PT POR, SHLY
15	5275.5-77	38.3	33.9	8.3	1.6	34.4 SS:DK GRY, MED-V/CSE, CLEAN,
16	5277 -78.5	55.2	42.7	8.0	3.9	34.0 SS:GRY, CSE-V/CSE, CLEAN
17	5278.5-80	0.05	0.05	2.2	4.5	62.7 SH:BUFF, DENS, SLI/CALC, FEW CSE SD GRNS

CONFIDENTIAL



SERVICE #5-B

401

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operation or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

Humble Oil & Refining Company

NAME OF COMPANY OR OPERATOR

P. O. Box 120,

Denver,

Colorado 80201

Address

City

State

This information will be furnished by letter when contract is awarded.

Drilling Contractor

Address

DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor

Navajo Tract 87 (14-20-0603-8811)

Well number

1

Elevation (ground)

8960' Ungraded

Nearest distance from proposed location to property or lease line:

880

feet

Distance from proposed location to nearest drilling, completed or applied—for well on the same lease:

feet

Number of acres in lease:

640

Number of wells on lease, including this well, completed in or drilling to this reservoir:

1

If lease, purchased with one or more wells drilled, from whom purchased:

Name

Address

Well location (give footage from section lines)

SE NE - 1830' FNL & 880' FEL

Section—township—range or block and survey

Sec. 23-36N-29E - G & SRM

Dedication (Comply with Rule 105)

80 acres (E/2 NE/4)

Field and reservoir (if wildcat, so state)

Dineh bi Keyah

County

Apache

Distance, in miles, and direction from nearest town or post office

Appr. 40 - 45 miles Southwest of Shiprock, N. M.

Proposed depth:

4,500'

Rotary or cable tools

Rotary

Approx. date work will start

As soon as possible.

Bond Status Blanket Bond

Organization Report

Filing Fee of \$25.00

Amount

On file ☒ Or attached

Attached Check No. 4925

Remarks:

CONFIDENTIAL

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Dist. Operations Supt. of the

Humble Oil & Refining Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

April 21, 1967

Date

Permit Number:

401

Approval Date:

4-25-67

Approved By:

John Bannister

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

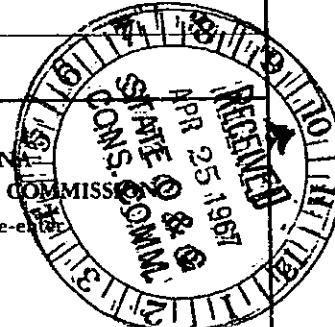
STATE OF ARIZONA
OIL & GAS CONSERVATION COMMISSION

Application to Drill or Re-enter

File Two Copies

Form No. 3

(Complete Reverse Side)



- | | |
|---------------------|--------------------------------|
| <p>Owner</p> | <p>Land Description</p> |
| | |

CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name
Roger S. Frazier

Position
Dist. Operations Supt.

Company
Humble Oil & Refining Co.

Date
April 21, 1967

I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

See Surveyors Plat Attached

Certificate No.

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
9-5/8"	32.30#	H-40	0	900'	900'	Circ. to surface.
7"	20#	J-55	0	4,500'	4,500'	Sufficient to cover all pays.



PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,
STATE OF ARIZONA,

To: HUMBLE OIL & REFINING COMPANY
(OPERATOR)

to drill a well to be known as

HUMBLE #1 NAVAJO 87

(WELL NAME)

located 1830' FNL and 880' FEL (SE/4NE/4)

Section 23 Township 36N Range 29E, Apache County, Arizona.

The E/2 NE/4 of said

Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 25th day of April, 19 67.

OIL AND GAS CONSERVATION COMMISSION

By

John Lannister
EXECUTIVE SECRETARY

PERMIT N^o 401

RECEIPT NO. 9493

State of Arizona
Oil & Gas Conservation Commission
Permit to Drill

FORM NO. 27

API 02-001-20025

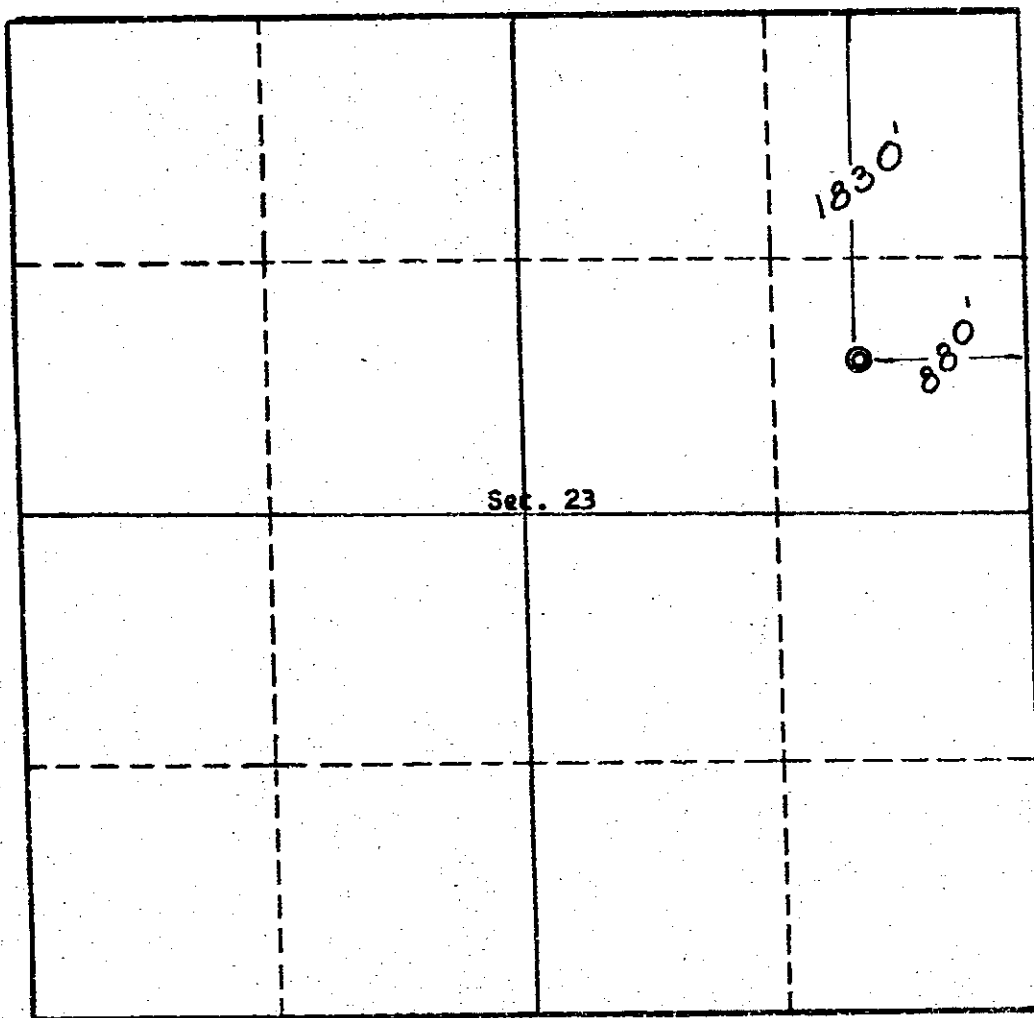
Company HUMBLE OIL & REFINING COMPANY

Well Name & No. Navajo Tract 87 #1

Location 1830 feet from the North line and 880 feet from the East line.

Sec. 23, T. 36 N., R. 29 E., G. & S. R. M., County Apache, Arizona

Ground Elevation 8960



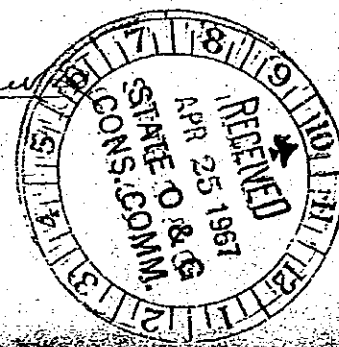
Scale, 1 inch = 1,000 feet

Surveyed April 15, 1967

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.



Ernest V. Echohawk
Ernest V. Echohawk
Registered Land Surveyor
Arizona Registration No. 2311



Ab 401

X-Chrono
X-Lambert

June 12, 1969

Mr. J. Roy Dorrough
Humble Oil & Refining Company
P. O. Box 120
Denver, Colorado 80201

Re: Humble #2 Navajo 138
T36N, R30E, G & SRM
Sec. 6: SE/4 SE/4
Permit #400 X
Apache County

Humble #1 Navajo 146
T36N, R30E, G & SRM
Sec. 15: SE/4 SW/4
Apache County
Permit #452 X

Humble #1 Navajo 87
T36N, R29E, G & SRM
Sec. 23: SE/4 NE/4
Apache County
Permit #401

Humble #1 Navajo 151
T36N, R30E, G & SRM
Sec. 35: SE/4 NE/4
Apache County
Permit #454 X

Dear Mr. Dorrough:

Authorization from this Commission is hereby granted to continue the captioned wells in a temporary abandoned status. This temporary abandoned status will expire June 16, 1970. We will require our Form #25 (or U.S.G.S. Sundry Notice Report) to be submitted monthly as you have done in the past.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf

HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

PRODUCTION DEPARTMENT
DENVER DISTRICT
J. R. DORRHOUGH
SUPERINTENDENT

June 5, 1969

POST OFFICE BOX 120
TELEPHONE 534-1251

Oil and Gas Conservation Commission
State of Arizona
Room 202, 1624 West Adams
Phoenix, Arizona 85007

Attn: Mr. James A. Lambert

Gentlemen:

Re: Humble #2 Navajo 138
T35N, R30E, G & SRM
Sec. 6: SE/4 SE/4
Apache County
Permit 400

Humble #1 Navajo 87
T36N, R29E, G & SRM
Sec. 23: SE/4 NE/4
Apache County
Permit 401

Humble #1 Navajo 146
T36N, R30E, G & SRM
Sec. 15: SE/4 SW/4
Apache County
Permit 452

Humble #1 Navajo 151
T35N, R30E, G & SRM
Sec. 35: SE/4 NE/4
Apache County
Permit 454

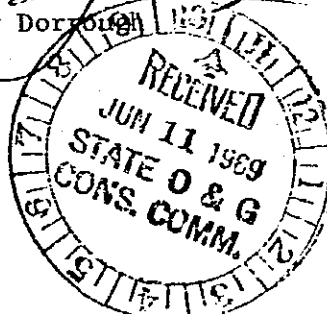
In answer to your letter of June 2, 1969, relating to the above, this is to advise that the working interest owners in the immediate vicinity of the above listed wells are currently actively attempting to form a unit which might eventually lead to the economic exploitation and production of helium bearing gas wells in the area.

Each of the above listed wells could become involved as a producer of helium bearing gas. We therefore request extension of the temporary abandoned status of these wells.

Very truly yours,

J. Roy Dorrough

JRD:mg



X-Chrono
X-Lambert

June 2, 1969

Mr. J. Roy Dorrough
Humble Oil & Refining Company
P. O. Box 120
Denver, Colorado 80201

Re: Humble #2 Navajo 138
T35N, R30E, G & SRM
Sec. 6: SE/4 SE/4
Apache County
Permit 400 X

Humble #1 Navajo 146
T35N, R30E, G & SRM
Sec. 15: SE/4 SW/4
Apache County
Permit 452 X

Humble #1 Navajo 87
T36N, R29E, G & SRM
Sec. 23: SE/4 NE/4
Apache County
Permit 401

Humble #1 Navajo 151
T35N, R30E, G & SRM
Sec. 35: SE/4 NE/4
Apache County
Permit 454 X

Dear Mr. Dorrough:

For the past year these wells have been carried in the temporary abandoned status. Please advise us what plans you have for each of the wells in the ensuing year and make new request for extending temporary abandon status should you wish that these wells remain in that status.

Yours truly,

James A. Lambert
Administrative Assistant

JAL:jf



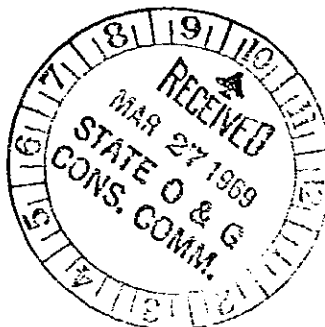
HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

March 24, 1969

POST OFFICE BOX 120



Mr. John Bannister
Arizona Oil & Gas Conservation Commission
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Dear Mr. Bannister:

Attached please find Bureau of Mines "Report of Analysis" of gas samples on all wells drilled by Humble Oil & Refining Company in the Dineh bi Keyah Area, Apache County, Arizona.

Well Name & No.	No. of Reports
Navajo Tract 87 #1-401	1
Navajo Tract 88 #1-421	3
Navajo Tract 88 #2-431	4
Navajo Tract 88 #3-443	1
Navajo Tract 140 #1-393	3
Navajo Tract 151 #1-454	3

These reports should complete all records on the well in this area. Analysis were not made on wells not listed above.

Very truly yours,


J. Roy Borrough
Dist. Supt.

Attach.

June 21, 1968

Mr. J. Roy Dorrough
Humble Oil & Refining Company
P. O. Box 120
Denver, Colorado 80201

Dear Mr. Dorrough:

Your letter of May 31, 1968 requests that certain gas wells be exempt from Capacity Testing in compliance with Rule 401. Our records do not reflect that any of these have been completed gas wells. Therefore, we will need the information indicated on the attached sheet.

We do have on file the application that the Humble 488 be considered as a salt water injection well.

As soon as we receive clarification on the above points, consideration will be given to your request.

Very truly yours,

John Bannister
Executive Secretary
ir

Humble Oil & Refining

Well	Completion Report	Samples		
# 1 - 140 Permit 393	due			
# 2 - 138 Permit 400	due			
# 87 Permit 401	due			
# 1-88 Permit 421	due			
# 4-88 Permit 447	due	due		Apply to convert to salt water injec
# 1-146 Permit 452	due	due		

ENCO

HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

May 31, 1968

POST OFFICE BOX 120

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams-Suite 202
Phoenix, Arizona 85007

Attn: Mr. John Bannister


Dear Sir:

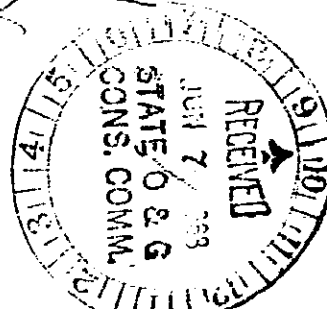
In compliance with Rule 401 and Directive D-2-67, we hereby request exemption from Capacity Tests of Gas Wells on the following shut-in gas wells during the month of June, 1968.

- 461 - #1 Navajo Tract 87
SE NE Section 23-36N-29E, Apache County
- 471 - #1 Navajo Tract 88
SE SE Section 25-36N-29E, Apache County
- 447 - #4 Navajo Tract 88
SE NW Section 25-36N-29E, Apache County
- 400 - #2 Navajo Tract 138
SE SE Section 6-35N-30E, Apache County
- 393 - #1 Navajo Tract 140
SE NE Section 8-35N-30E, Apache County
- 452 - #1 Navajo Tract 146
SE SW Section 15-35N-30E, Apache County

Your approval of these exemptions will be appreciated.

Very truly yours,


J. Roy Dorrough



JACK WILLIAMS
GOVERNOR
LYNN LOCKHART
CHAIRMAN
LUCIEN B. OWENS
VICE CHAIRMAN
HIRAM S. CORBETT
MEMBER
GEORGE T. SILER
MEMBER
KENNETH G. BENTSON
MEMBER

OFFICE OF
Oil and Gas Conservation Commission
STATE OF ARIZONA
ROOM 202
1624 WEST ADAMS
Phoenix, Arizona 85007
PHONE: 271-5161

JOHN BANNISTER
EXECUTIVE SECRETARY
J. R. SCURLOCK
PETROLEUM GEOLOGIST

July 10, 1967

Humble Oil & Refining Company
P.O. Box 120
Denver, Colorado 80201

Attention: Mr. Roger Frazier

Re: Humble #1 Navajo 140 (Permit 393)
SE NE 8-35N-30E, Apache County, Arizona

Humble #2 Navajo 138 well (Permit 400)
SE SE 6-35N-30E, Apache County, Arizona

Humble #1 Navajo 87 well (Permit 401)
SE NE 23-36N-29E, Apache County, Arizona

Gentlemen:

Attached please find Directive 1-78 adopted during the Commission's meeting of June 21, 1967.

The effect of this directive will be to remove all wells in temporarily abandoned status prior to June 21, 1967 from the status of confidential as of December 31, 1967. All obligations owed to this Commissioner concerning the filing of logs, reports, samples, will be due within the schedules as set forth in the Rules and Regulations from July 1, 1967. Of course an application to plug and plugging report will not be needed at this time. In lieu of our Form 4, Well Completion Report, it will be necessary that you file a status report covering the complete history of the well to the date of its temporary abandonment.

Should you have any questions concerning this directive or this letter, please advise at your earliest convenience.

Very truly yours,

John Bannister
Executive Secretary
mr

cc: Mr. H.L. Spiller, Oklahoma City

June 20, 1967

Humble Oil & Refining Company
P.O. Box 120
Denver, Colorado 80201

Attention: Mr. J. Roy Dorrrough

Re: Humble #1 Navajo 140 well (Permit 393)
SE NE 8-35N-30E, Apache County, Arizona

Humble #2 Navajo 138 well (Permit 400)
SE SE 6-35N-30E, Apache County, Arizona

Humble #1 Navajo 87 well (Permit 401)
SE NE 23-36N-29E, Apache County, Arizona

Gentlemen:

By your letters of June 15, 1967 you requested permission from this Commission to temporarily abandon the captioned wells pending the development of a helium market and additional drilling.

This letter constitutes permission from this Commission to temporarily abandon captioned wells for the reasons stated in your requests.

This Commission should of course be notified when you plan to again commence operations on these wells.

Very truly yours,

John Bannister
Executive Secretary
MB



HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

DENVER DISTRICT

June 15, 1967

POST OFFICE BOX 120

Oil and Gas Conservation Commission,
State of Arizona
Suite 202, 1624 West Adams
Phoenix, Arizona 85007

Attn: Mr. John Bannister

Gentlemen:

In accordance with Rule 202.B of the Arizona Oil and Gas Conservation Commission Rules and Regulations, we request permission for temporary abandonment of the following well:

Navajo Tract 87 #1 - Permit #401
SE NE Section 23-36N-29E, Apache County, Arizona

Operations on this well have been suspended and the well is temporarily abandoned pending development of a helium market for the field, which may take some time, and additional development in other wells in the helium bearing formations in the area.

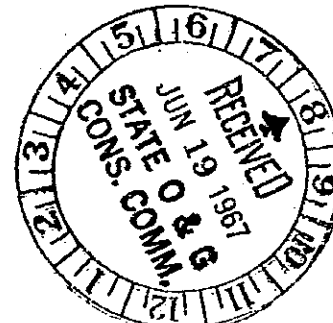
Pending development of a helium market and additional drilling, we request approval to keep this well in the temporarily abandoned status for an indefinite period.

Very truly yours,

J. ROY DORROUGH

By


Roger S. Frazier



June 9, 1967

Mr. H.L. Spiller
Humble Oil & Refining Company
2000 Classen Center-North
Oklahoma City, Oklahoma 73106

Re: Humble #1 Navajo S7
SE NE 23-36N-29E Apache County, Arizona
Permit 401

Dear Mr. Spiller:

We have received notice that operations on captioned well, which you indicated is a helium well, will be temporarily suspended.

Please be advised that should Humble decide to keep this as a shut-in helium well it will be necessary that 640 acres be dedicated to this well (rule 105.B) and that an application for an unorthodox location (rule 105.D) be made prior to production.

I would further remind you that should work be suspended on this well in excess of 60 days, Rule 202.B would become applicable. Of course if this well is completed and then shut-in this latter step will not be necessary.

Should you have any questions, would you please advise.

Very truly yours,

John Bannister
Executive Secretary
mr

AB
JP
HUMBLE OIL & REFINING COMPANY

OKLAHOMA CITY, OKLAHOMA 73106

EXPLORATION DEPARTMENT
CENTRAL DIVISION

April 27, 1967

2000 CLASSEN CENTER-NORTH
JACKSON 8.2411

Re: Navajo Tract 87 #1
SE NE Section 23-36N-29E
Apache County, Arizona

Oil & Gas Conservation Commission
State of Arizona
1624 West Adams, Suite 202
Phoenix, Arizona 85007

Attention: Mr. John Bannister

Gentlemen:

By his letter of April 26, 1967, Mr. J. Roy Dorrough requested you to keep all information on the above well confidential. We recognize that your agency is entitled to receive information regarding this well and we want to assure you that we will cooperate in every possible way to make this information available.

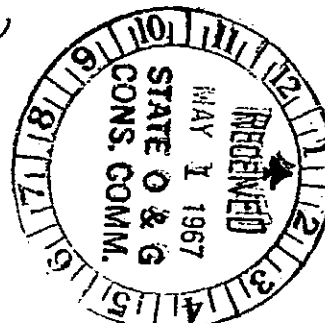
Based on past experience, we anticipate that there will be a number of visitors to this location. In order to insure that no unauthorized persons are permitted at the drillsite and to insure that information on this well is kept confidential, we request that you advise any of your personnel who may contemplate visiting this well that before being admitted to the location they will be required to show positive identification and to acknowledge that they are aware that all information concerning the well is to be held in strict confidence. We will also want to assure ourselves that any visitor from your agency is familiar with the regulations pertaining to dissemination of any information obtained.

Should this request cause any problems with your agency or if any additional information is required, we will be pleased to discuss the matter at your convenience.

Very truly yours,

H. L. Spiller
H. L. Spiller

ACM:sr





HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

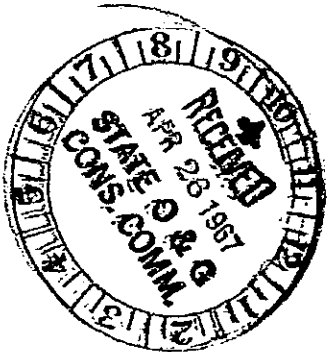
JB
DENVER DISTRICT

P. O. Box 120

POST OFFICE BOX 120

April 25, 1967

CONFIDENTIAL



Oil & Gas Conservation Commission
Mr. John Bannister
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Dear Mr. Bannister:

At the time the "Application for Permit to Drill" our Navajo Tract 87 #1 was submitted a Drilling Contractor had not been selected. This is to inform you that the contract as been awarded to the following:

Loffland Brothers Company
P. O. Box 4567
Tulsa, Oklahoma 74114

If any further information is desired at any time, please do not hesitate to call on us.

Very truly yours,

Roger S. Frazier
Roger S. Frazier
Dist. Operations Supt.

CONFIDENTIAL

401

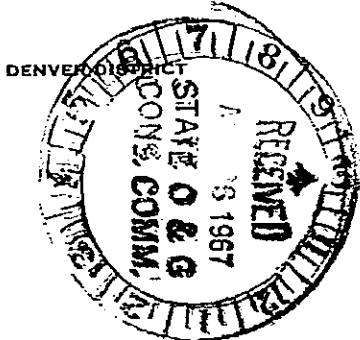
ENCO

HUMBLE OIL & REFINING COMPANY

DENVER, COLORADO 80201

April 25, 1967

POST OFFICE BOX 120



Oil & Gas Conservation Commission,
State of Arizona
1624 West Adams - Suite 202
Phoenix, Arizona 85007

Attn: Mr. John Bannister

Gentlemen:

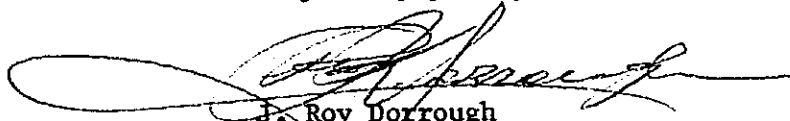
By this letter we request the Oil and Gas Conservation Commission,
State of Arizona, to keep all information on the following well confidential:

Navajo Tract 87 No. 1
SE NE Section 23-36N-29E
Apache County, Arizona

All reports on this well will be clearly marked "CONFIDENTIAL."
Your cooperation will be greatly appreciated.

If any additional information is needed, please notify us and
it will be furnished.

Very truly yours,



J. Roy Dorrough

cc: United States Geological Survey
Navajo Tribe - Mr. Henry F. Pohlmann

4-27-67

Telcon, Mr. Roger Frazier, Denver

Re: Humble #1 Navajo 140

Spudded 4:00 a.m. 4-27-67

Re: Humble #1 Navajo 87

Road permitting, will spud sometime today

*Drilling under supervision of
Mr. Spuller, Okla. city office*